Commander, Navy Installations

Force Protection

Investment Strategy

June 2005

In the Past. . .

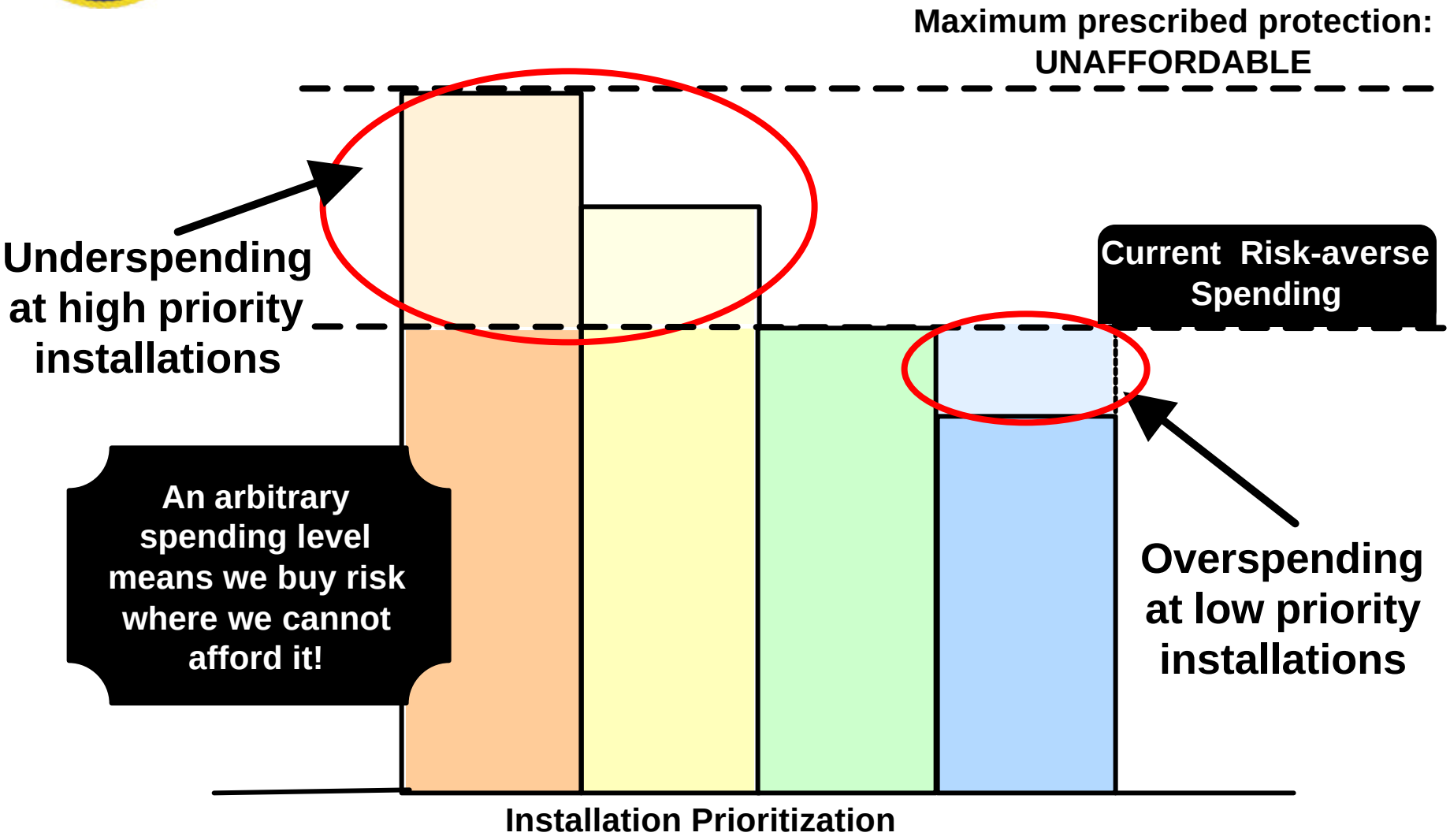
- Navy lacked a single overarching Ashore AT/FP vision
- Efforts were installation-centric with no strategy
- Khobar Towers, USS Cole, and 9/11 drove diffusion and divergence of resource application and readiness output
- Attempted to be everywhere, all the time

RISK AVERSION has been the approach

Inconsistency + No Standardization + Unrealistic Resourcing + Prohibitive cost =

UNATTAINABLE READINESS

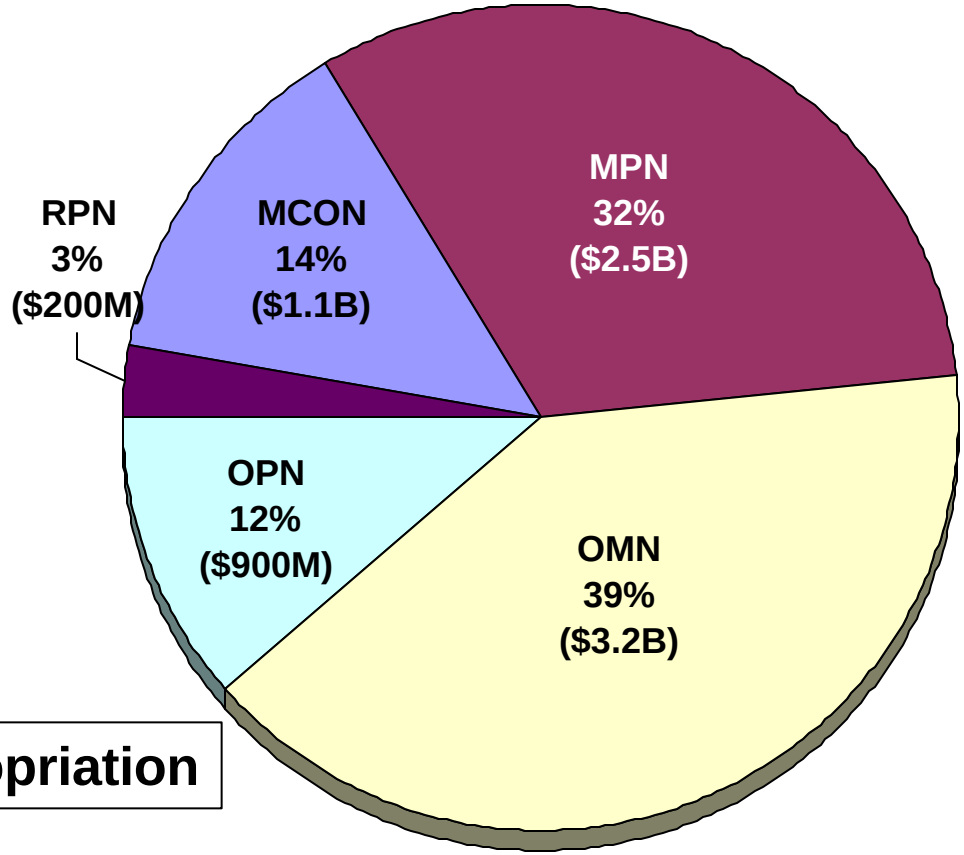
Risk-averse Spending
(Notional)



Influences

- *GAO Report, "DOD Efforts to Improve Installation Preparedness Can Be Enhanced with Clarified Responsibilities and Comprehensive Planning*" August 2004
  - Recommends Department of Defense incorporates results-oriented management principles and clarifies installation preparedness related responsibilities
- *CJCSI 3170.01D Joint Capabilities Integration and Development Systems (JCIDS)*, 12 March 2004
  - Establishes process to identify, assess, and prioritize joint military capability needs
- *Defense Planning Guidance* (FY2004-2009)
  - Adopt a capabilities based approach to focus on the broad set of capabilities needed to deter, deny and defeat attacks
- *GAO Report, "Combating Terrorism:Actions Needed to Guide Services' Antiterrorism Efforts at Installations*" November 2002
  - Use assessments of threat, vulnerability, and criticality of assets to form foundation of installation antiterrorism plans and support a risk management approach to resource allocation
- *Memorandum from Secretary Wolfowitz*, 5 September 2002
  - Policy of the Department is to protect personnel from CBRNE attacks, to respond to these attacks, and to ensure installations are able to continue critical operations and resume essential operations

Ashore Combating Terrorism Resources



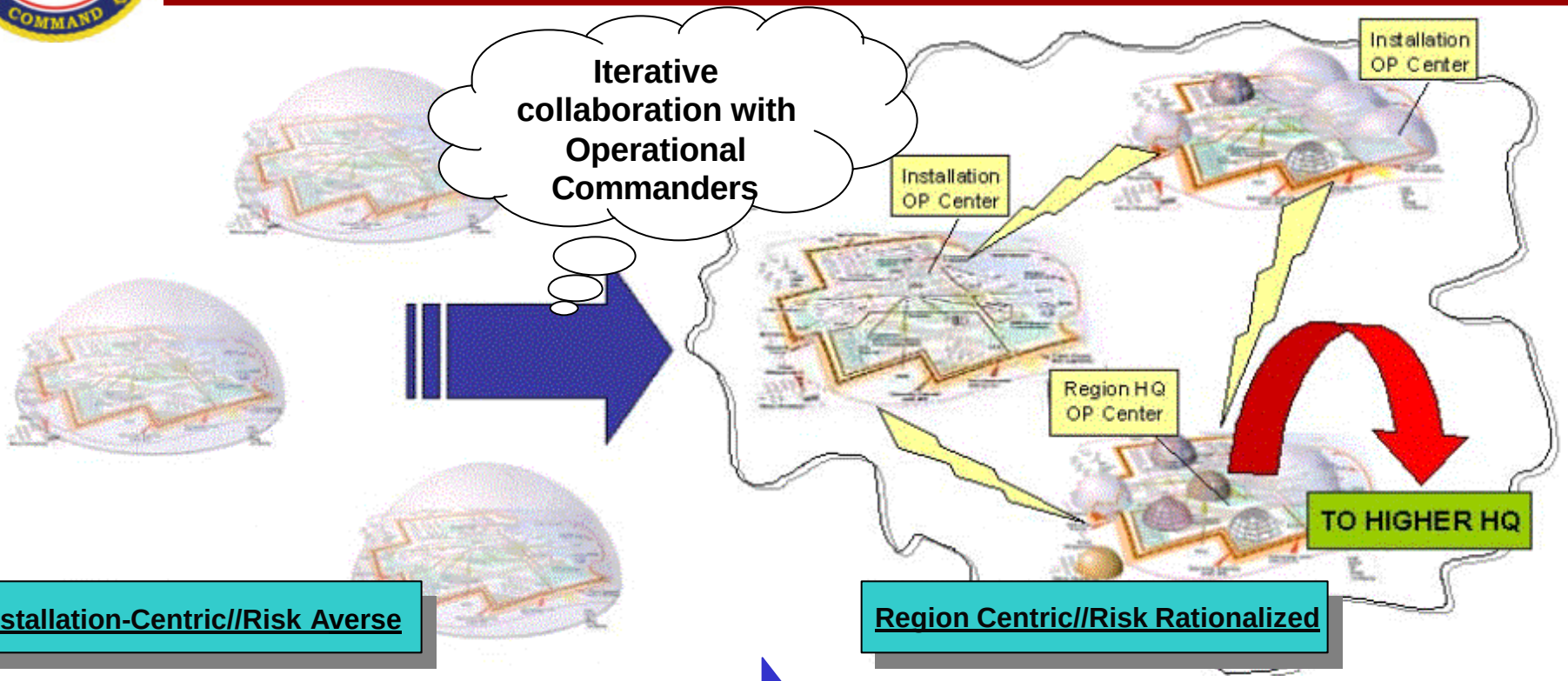
Total = $7.9B
(FY05-09)

Appropriation

CNI's Vision for Implementing AT/FP at Shore Installations

- **Formalized Framework**
- **Region Centric**
- **Capabilities Based**
- **Risk Management Approach**

Now. . .Future



Installation-Centric//Risk Averse

- Aversion to risk – Unachievable
- Slow implementation, increased risk
- Prohibitive cost
- Unrealistic resourcing
- DoD/Joint Vision
- Lack of sustainment

Region Centric//Risk Rationalized

- Management of risk
- Quicker implementation
- Balanced resource application based on Navy-wide capability gaps, criticality, vulnerability, threat
- Formalized framework

Strategy

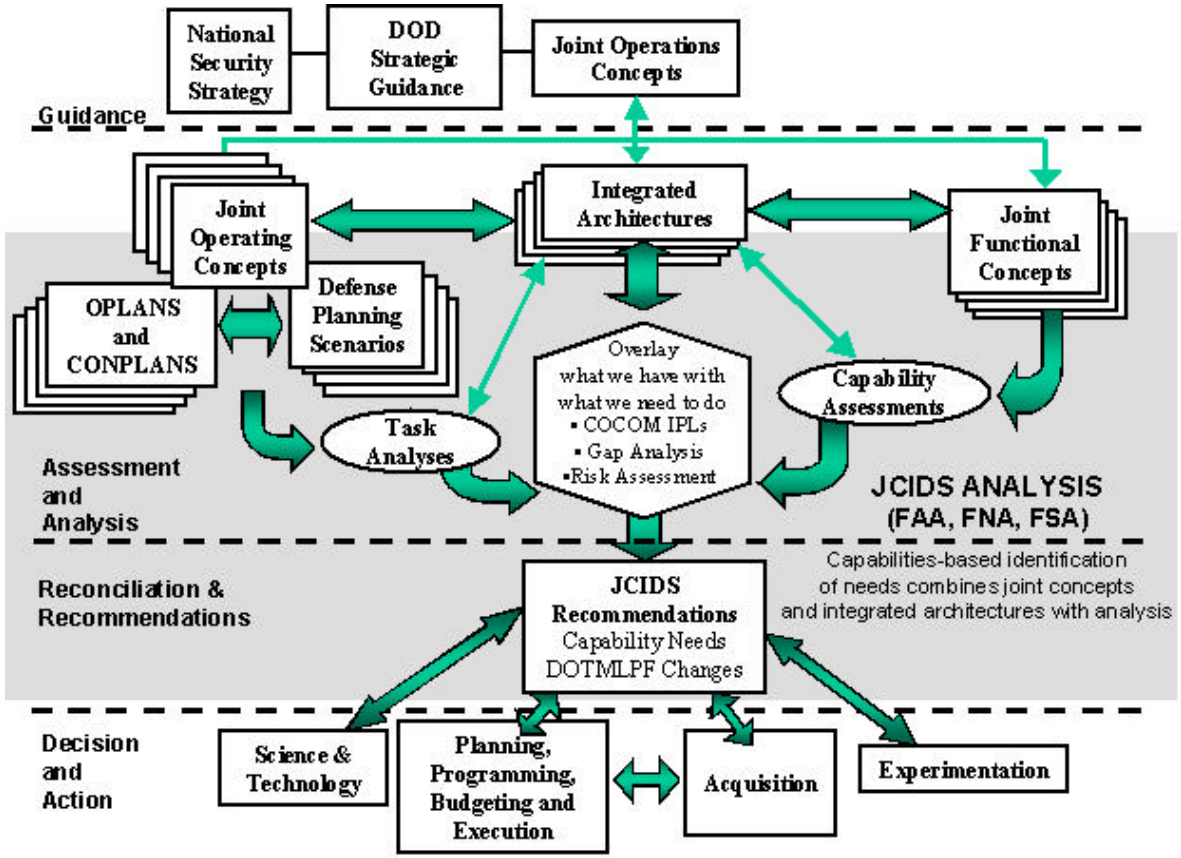
- Align programs using Joint and General Accounting Office (GAO) guidance
- Senior Steering Group (SSG)/SYSCOM Antiterrorism Team (SAT) Process
  - Requirements Generation
  - Resource/Programming
  - Execution
  - FFC Advisory Role
- Refine FFC/CNI Requirements Identification Process
- Fully Realize Public Safety Shore Installation Model starting with Pilot Program development and execution
- Implement Risk-Based Investment Strategy
- Develop Region-Centric Programs of Record to include sustainment

Development of Ashore AT/FP Program Process

Basic Tenets

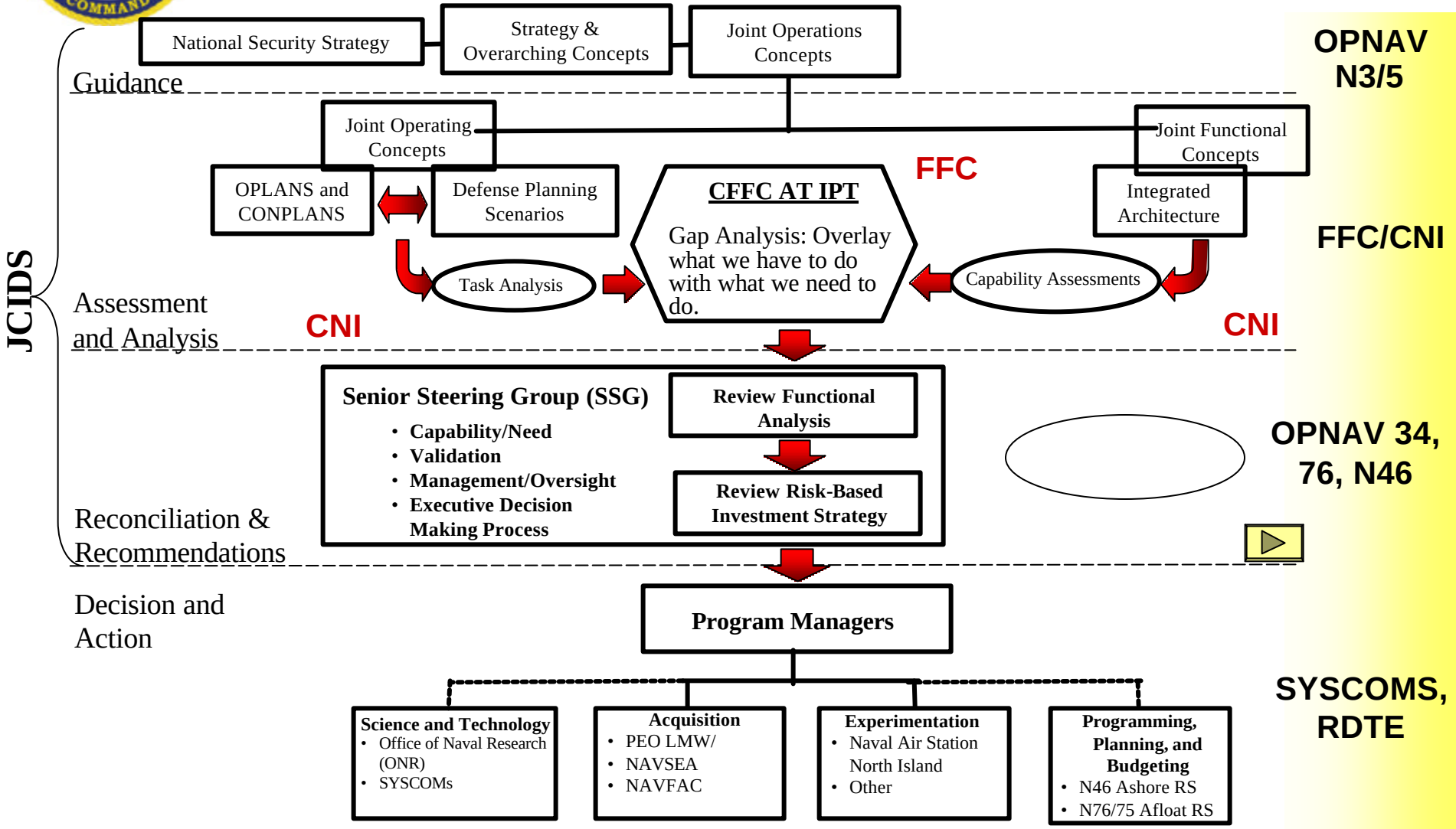
- **Joint Capabilities Integration Development System (JCIDS)**
  - **Joint concept centric capability identification process**
  - **Assess existing and proposed capabilities**
  - **Deliver technologically sound sustainable and affordable increments of capability**
  - **Aligns AT Ashore with the JS Protection FCB**

JCIDS Analysis

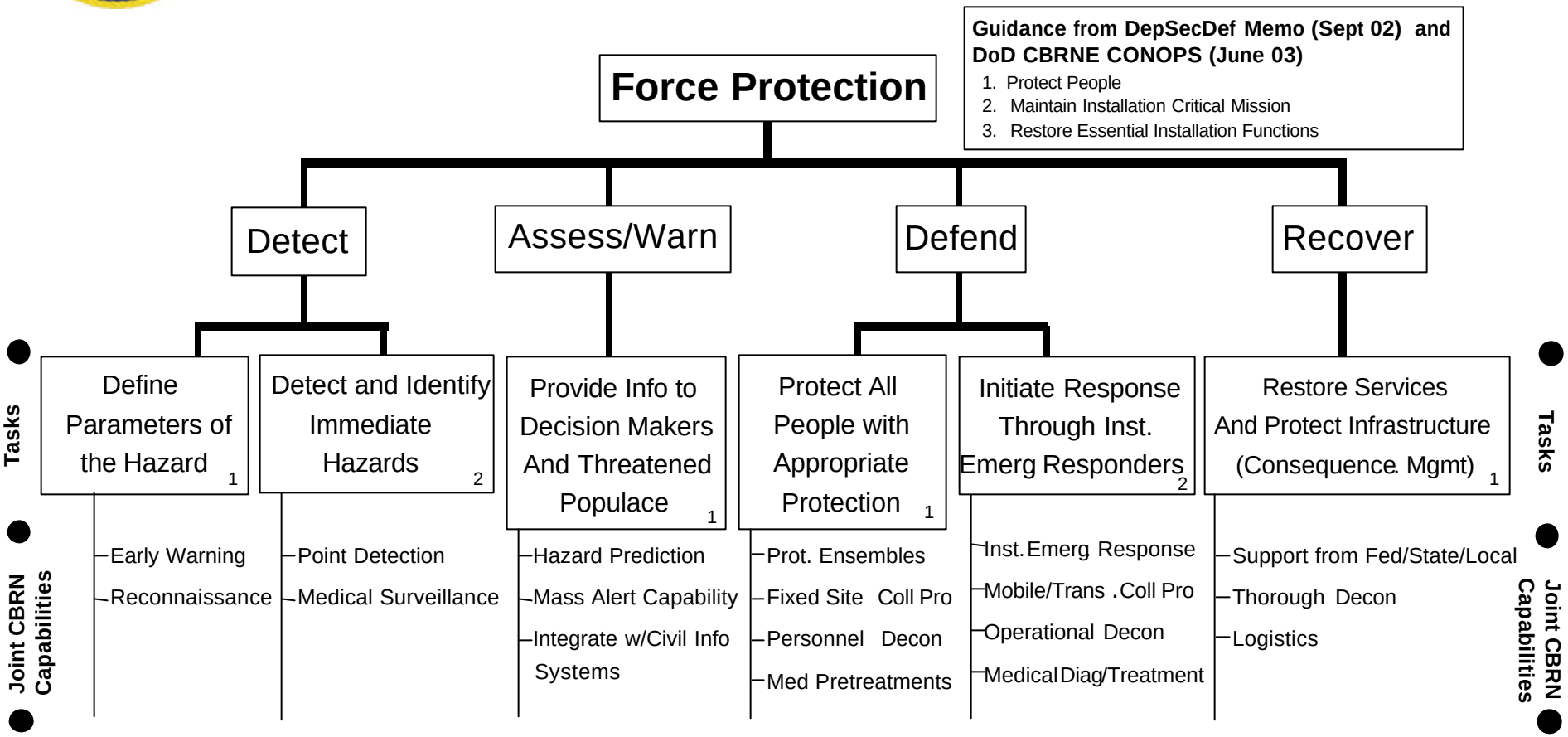


- A capabilities-based approach that leverages government agencies, industries, and academia
- Allows flexibility in meeting security challenges
- Considers the most effective joint force capabilities and integrates them early in the acquisition process

AT/FP Capabilities & Integration Process



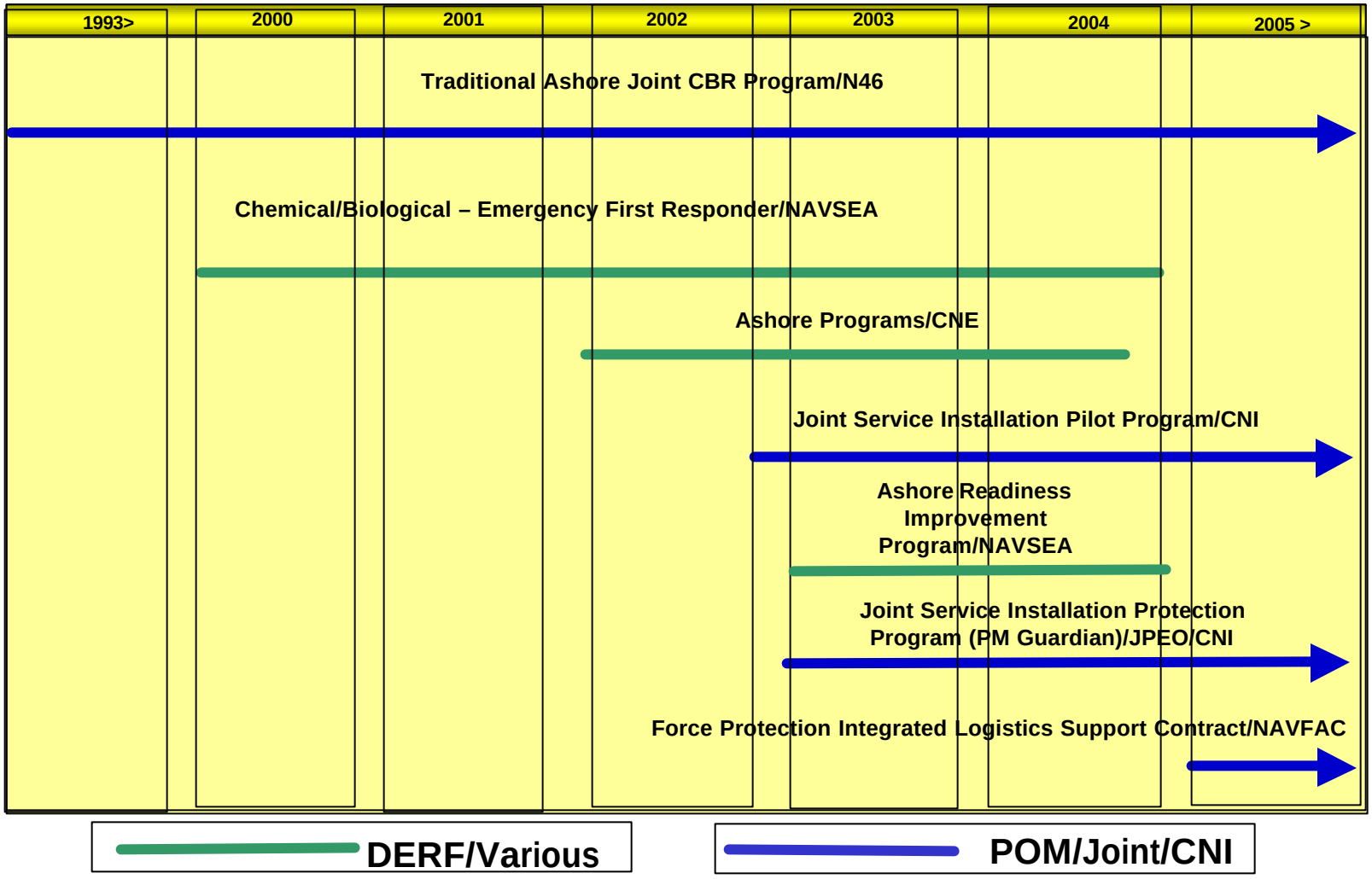
DoD Proposed Ashore AT/FP Architecture



Current Joint/Navy Legacy CBRN Programs

- **Six separate fielding programs**
  - Traditional Ashore Joint CBR Program
  - Chemical/Biological – Emergency First Responder
  - Ashore Programs
  - Ashore Readiness Improvement Program
  - Joint Service Installation Pilot Program
  - Joint Service Installation Protection Program (PM Guardian)
- **One logistics program**
  - Integrated Logistics Support Contract

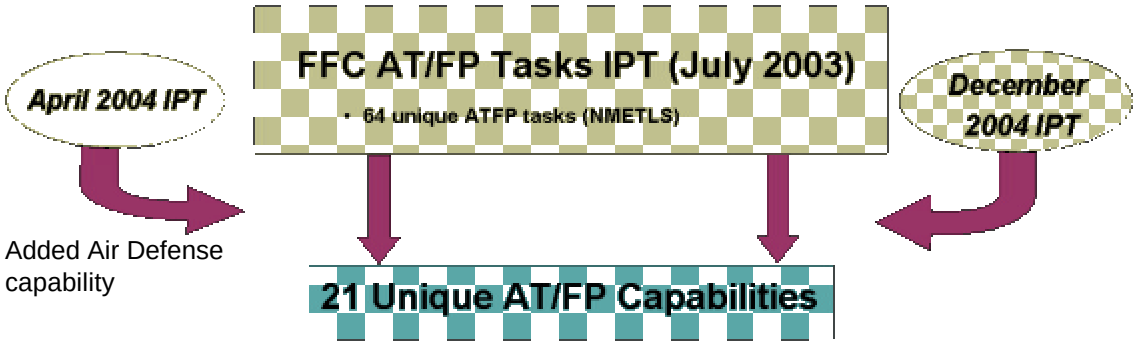
CBRN Programs



CNI Public Safety Strategy for Joint Programs

- Satisfy Joint Staff Guidance — Y
- Align with CB Ashore programs — G
- Establish Life Cycle Management — Y
- Sustainable and Standardized — G
- Assess/quantify impacts of all CBRN equipment being delivered through joint programs ("The Purple Band") to Regions/Installations to define/de-conflict requirements for Risk Rationalized AT/FP Plan ("The Blue Band") — G

CFFC Program Guidance/Priority

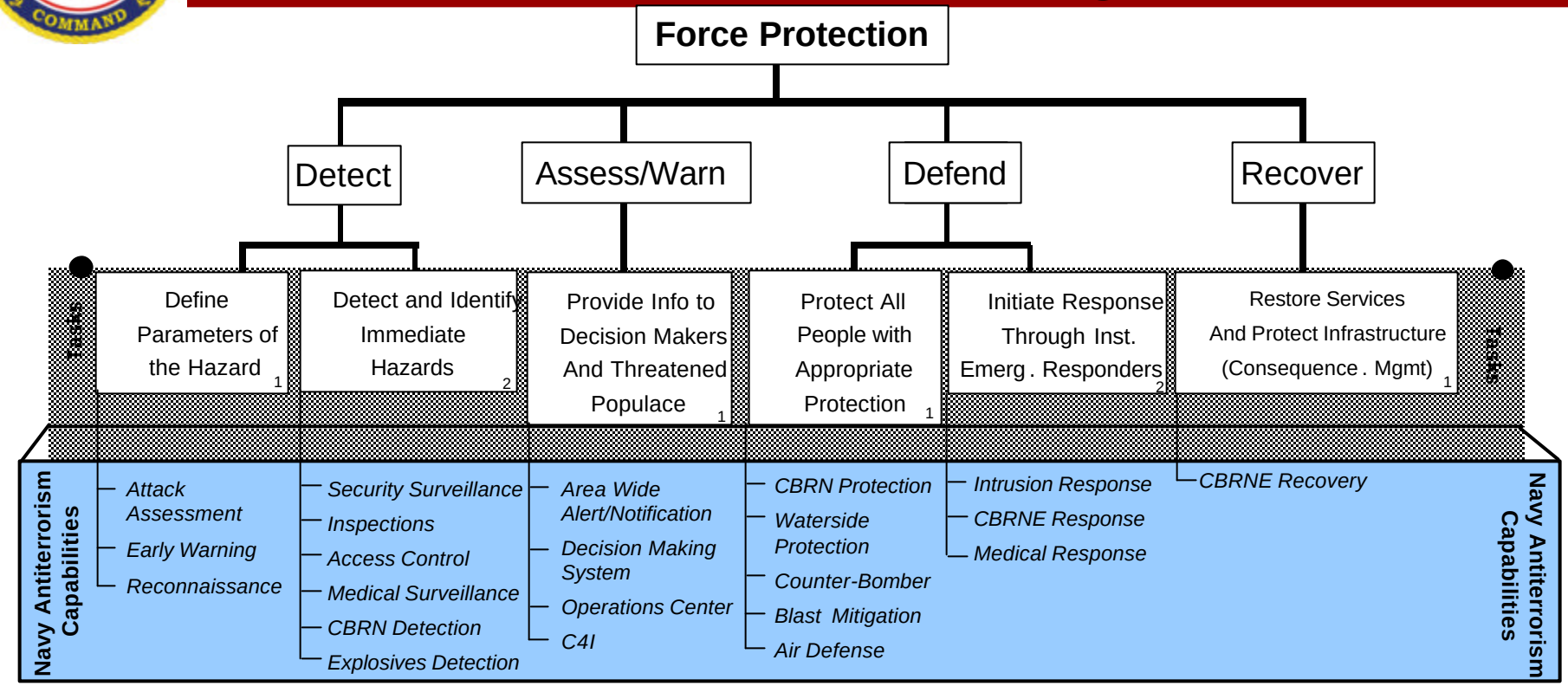


Development and Implementation of Ashore AT/FP Program

"CFFC (4-Star) Intent"

- **Establish and Optimize Cost Effective AT Capabilities**
- **Manage CBRN Expenditures in Support of Joint Programs**
- **Pursue Capability Pilot Projects for Implementation**
  - **Information Management & Base-Wide Alert**
  - **Physical Security/Access Control**
- **Identify Full-Spectrum Capabilities to Facilitate Training, Exercise, and Reporting Requirements**
- **Align AT/FP Capabilities around FFC Requirements IPT Process**

Development and Implementation of Navy Ashore AT/FP Program



The operational tasks identified in the JCIDS analysis define what installations are required to do; capabilities are born from the strategic bundling of unified tasks

Development of CNI Risked-Based Model

ASSERTION

Risk can be analyzed and managed by focusing on Threat, Vulnerability and Criticality

Threat (Likelihood of something bad happening)

–What threats exist today and what is the relative likelihood of each threat?

–How would the likelihood of the threat change by investing in specific antiterrorism capabilities?

Vulnerability (Likelihood controls in place will fail)

–If an attack were attempted, what is the likelihood that it is successful?

–By implementing a specific Force Protection capability, what level of reduction in vulnerability to an attack of this type can be expected?

Criticality (Magnitude of the loss)

–If an attack occurs and is successful, what are the consequences to:

- People
- Assets and Infrastructure
- Mission Capability

} DEPSECDEF memo dtd 5 Sept 2002

–By implementing the specific Force Protection capability, what level of reduction in criticality can be expected?

Joint Publication 1-02, 12 April 2001 and GAO Report *"Further Actions Needed to Coordinate Federal Agencies' Facility Protection Efforts and Promote Key Practices"* November 2004

CNI Risk-Based Model

Fleets with CNI

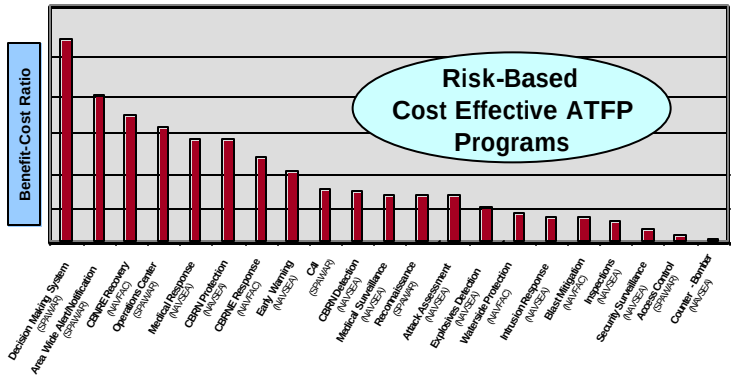
- Threats (MTAC)
- CVAMP Vulnerabilities
- Criticalities
- Capabilities

SYSCOM AT/FP PMs

- Technology Maturity
- Deployability

Threat type	Target	Criticality: People	Criticality: Economic	Criticality: Mission	Baseline	Risk Impact of AT Capability: Attack Assessment	Early Warning	Reconnaissance	Security Surveillance	Inspections	Access Control	Medical Surveillance	CBRN Detection	Explosives Detection	Area Wide Alert/Notification	Decision Making System
Land	Personnel															
	Relative Threat:															
	Vulnerability:															
	Criticality:															
Land	Structures															
	Relative Threat:															
	Vulnerability:															
	Criticality:															
Land	Vessels and aircraft															
	Relative Threat:															
	Vulnerability:															
	Criticality:															
Land	CIP															
	Relative Threat:															
	Vulnerability:															
	Criticality:															
Sea	Personnel															
	Relative Threat:															
	Vulnerability:															
	Criticality:															

Conducted risk assessments of potential attack scenarios to assess the effectiveness of AT capabilities defined by JCIDS



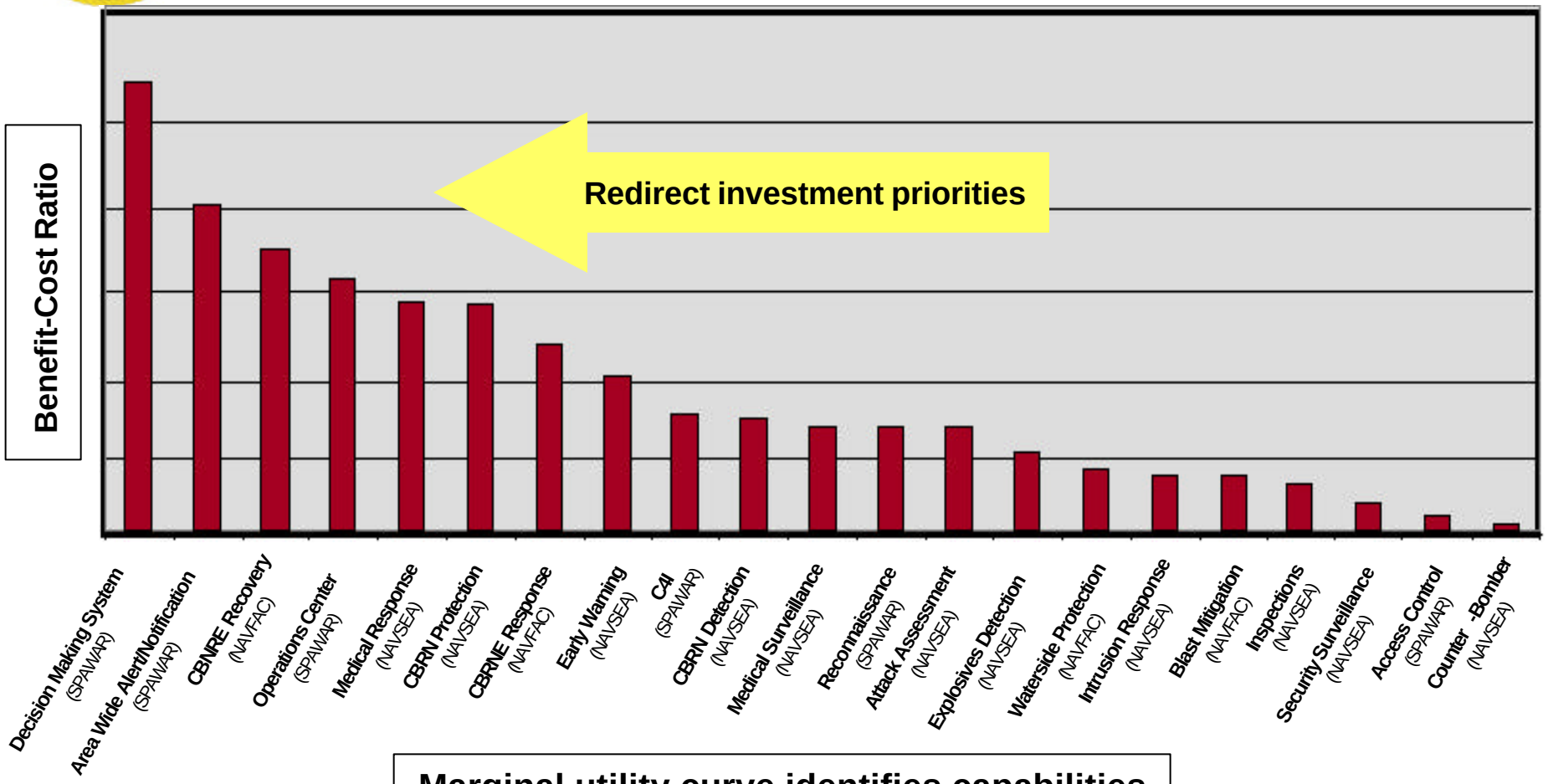
$$= \frac{\{[\text{Risk(T/V/C)}_{\text{Baseline}}] - [\text{Risk(T/V/C)}_{\text{WithAT Capability}}]\} \times (\text{TF}) \times (\text{DF})}{\text{Navy Cost of the AT Capability}}$$

Risk(T/V/C) = Risk measured as a function of Threat, Vulnerability, and Criticality
TF = Technology maturity factor
DF = Deployability factor

Published in *The Journal of Homeland Security*, February 2004

CNI Risk-Based Model

AT/FP Capabilities Relative Ranking of Benefit-Cost



Marginal utility curve identifies capabilities that reduce overall FP risk at lower cost

Required Operational Capabilities (ROC) Construct

ROC 1- <u>Strategic Asset & High Threat Bases</u> (2%)*

(a) Provides protection for nuclear weapons and supporting systems (SSBNs). Staffed to support current DoD (41M) security requirements.

(b) Requires special protection requirements due to their high threat environment. Tailored staffing to support fulltime C/D.

ROC 2 - <u>Operational Bases (OB) and critical C4ISR</u> (40%)

– Major fleet homeports home-ported combatant ships and/or tactical aircraft; forward operating locations (OCONUS); critical load-out/ embarkation stations; and critical C4ISR communication stations.

ROC 3 - <u>Sustainment & Support Activities (S&SA)</u> (33%)

(a) Sustainment - Hospitals, bases with non-combatant ships, non-tactical aircraft, weapons storage facilities, logistics sites, shipyards & maintenance facilities.

(b) Support - headquarters, and communication sites; and includes any enclave area associated with ROC 2 bases.

ROC 4 - <u>Administrative and Training Activities (A&TA)</u> (25%)

– Reserve bases; R&D centers; administrative facilities/complexes, i.e. BUPERS Millington; recreational areas and MWR facilities; exchanges and commissaries; training sites, e.g. Naval Academy and Staff Colleges; museums and displays like the USS Constitution; and includes any enclave area associated with ROC 2 or 3 bases.

*Percentage of Navy installations

NMET Conditions and Measures

NTA: Establish and Enforce Protection Perimeter

Supported Capability: Access Control

Conditions: CONUS/OCONUS, ashore, afloat, All Weather

Measures:

M1 Yes/No – Force Protection Perimeter established IAW ATFP plan? Scalable from CL1-4

M2 Percent – Perimeter penetrations repelled. Scalable from CL1-4

NMETS are the basis of metrics for:

- Material resourcing
- Manpower resourcing
- Readiness tracking
- Training standards for unit exercises
- DOTMLPF

Fleet Forces Command website, Antiterrorism (AT) Library

NMET Scalability
ROC – Access Control

ROC 4

MINIMUM PROTECTION LEVEL

- Place Barriers and Obstacles
- Enforce Exclusion Zones
- Receive and Transmit Force Orders
- Review ROE
- Formulate Standing Plans
- Rehearse Operation
- Protect Individuals and Systems
- Establish and Enforce Protection Perimeter
- Conduct Surveillance and Detection Operations
- Combat Terrorism
- Provide Emergency Assistance

Tasks added →

ROC 3

- Employ Military Working Dogs
- Place Barriers and Obstacles
- Enforce Exclusion Zones
- Receive and Transmit Force Orders
- Review ROE
- Formulate Standing Plans
- Rehearse Operation
- Protect Individuals and Systems
- Establish and Enforce Protection Perimeter
- Conduct Surveillance and Detection Operations
- Combat Terrorism
- Provide Emergency Assistance

Tasks added →

ROC 1/2

- Protect Individuals and Systems
- Provide Security for Operational Forces and Means
- Protect/Secure Operationally Critical Installations, Facilities, and Systems
- Employ Military Working Dogs
- Place Barriers and Obstacles
- Enforce Exclusion Zones
- Receive and Transmit Force Orders
- Review ROE
- Formulate Standing Plans
- Rehearse Operation
- Protect Individuals and Systems
- Establish and Enforce Protection Perimeter
- Conduct Surveillance and Detection Operations
- Combat Terrorism
- Provide Emergency Assistance

NMET Scalability
ROC – Access Control Sample

Perimeter Fencing

Military Working Dogs

CIP

Critical Infrastructure Protection

ROC 1

ROC 2

ROC 3

ROC 4

Linking ROCs and CLs

with Notional Regional Overlay

OBJECTIVES

- Better linking of resources to output
- Enhances costing at various levels of performance
- Improves linkage between mission requirements, known capabilities, and performance
- Better aligns product and service delivery with warfighter/customer expectations
- A better assessment of capability versus requirement supporting management of risk.

$$\text{Productivity} = \frac{\text{Output}}{\text{Cost}}$$

The 4X4 Matrix

SUSTAINABILITY ▶

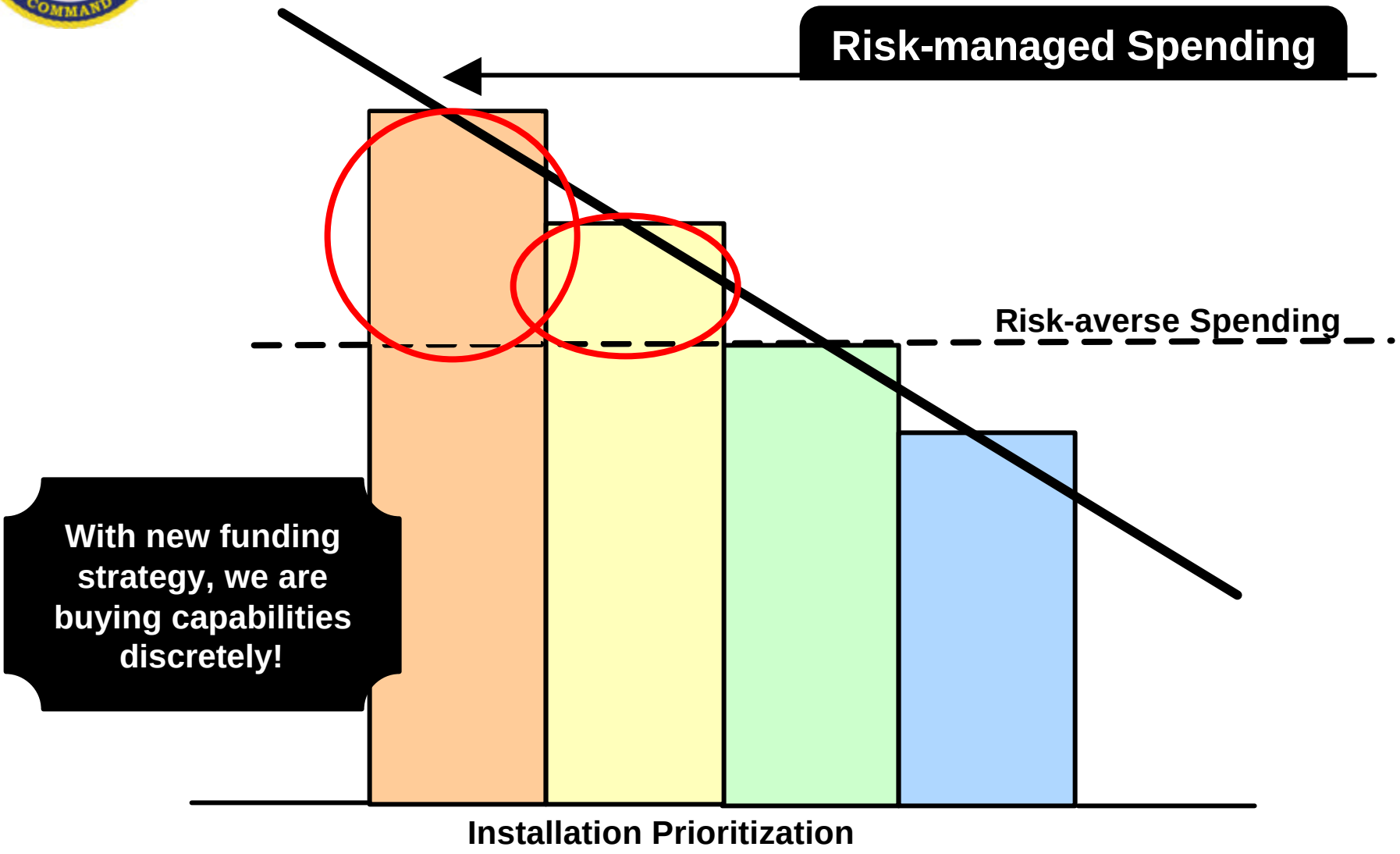
CAPABILITY ▼

	Capability Level 1	Capability Level 2	Capability Level 3	Capability Level 4
ROC1	KINGS BAY			
ROC2			KEY WEST MAYPORT	
ROC3			MERIDIAN ATLANTA	
ROC4			ATHENS	

NOTIONAL

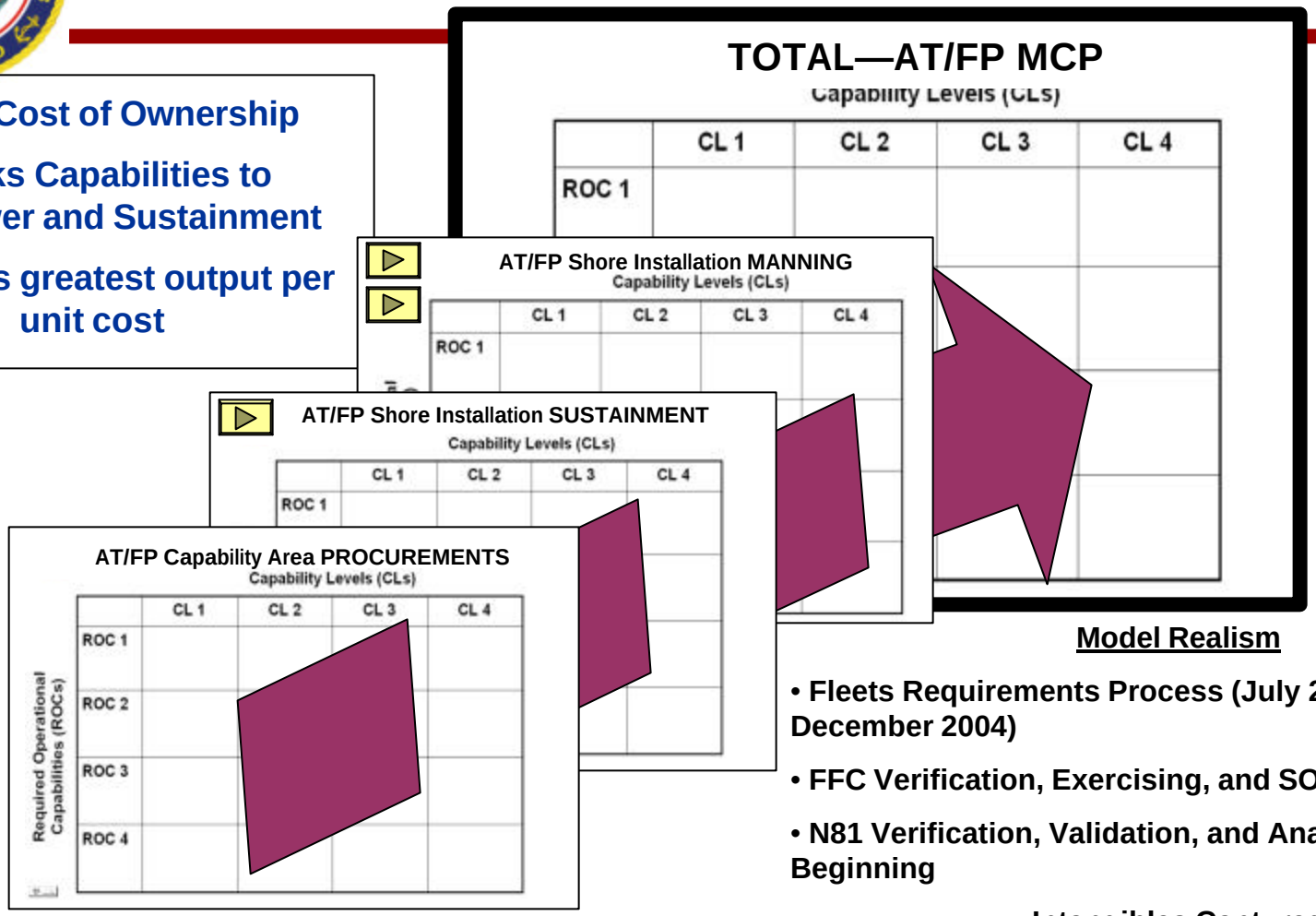
Joint Staff Installation & Facility Preparedness Guidance (2004)

Risk-managed Spending



Ashore AT Capabilities Package

- **Total Cost of Ownership**
- **Links Capabilities to Manpower and Sustainment**
- **Realizes greatest output per unit cost**



Model Realism

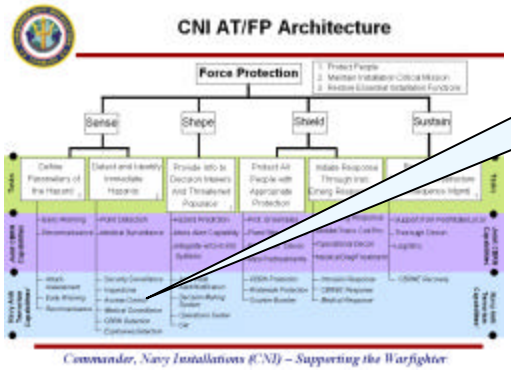
- **Fleets Requirements Process (July 2003, April & December 2004)**
- **FFC Verification, Exercising, and SORTS**
- **N81 Verification, Validation, and Analysis Process Beginning**

Intangibles Captured

- **SAT/SYSCOM Execution Guidance by CNI**

Shore Program Centric Solutions

Moving away from installation centric AT/FP solutions ***… to Program Centric AT/FP Solutions.***



Access Control

Via CNI w/ SAT

NAVFAC Program Manager

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N46/CNI Resourcing FYDP

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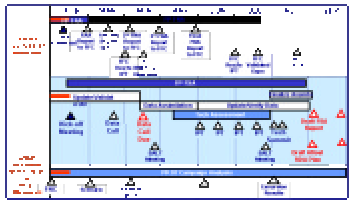

Technology Roadmap (Under Development)

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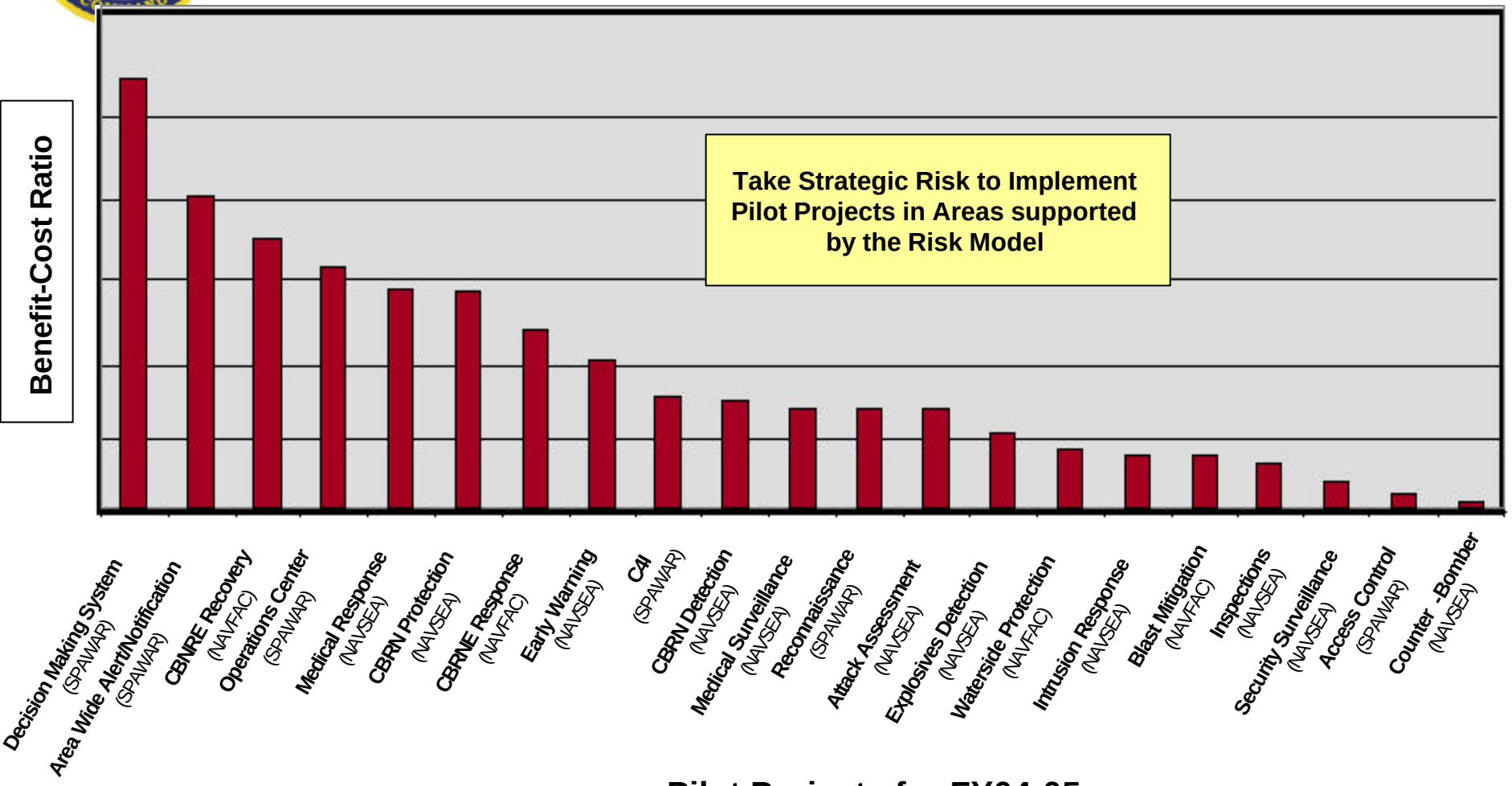
FFC IPT Tasks/ (NMETLS)

CNI Risk Based Investment Model



Pilot Projects for FY04-05

Information Management & Base Wide Alert

Physical Security/Access Control

AT/FP Investment in Pilot Programs

	Information Management & Base Wide Alert		Physical Security / Access Control Pilot			
Location	**CNRMA**		**CNRSE**		**CNRSW**	
	Cost	**Date**	**Cost**	**Date**	**Cost**	**Date**
Phase 1 OMN	500,000	February	250,000	January	500,000	February
Phase 2 OMN	1,000,000	August	500,000	August	1,000,000	August
Phase 2 OPN	TBD					
	SPAWAR					

AT/FP Investment in Pilot Programs

Information Management & Base Wide Alert

- CNRMA
- Leave-behind C4I capability (technology and CONOPs) supporting AT/FP and Emergency Management
- Leverage existing technologies
- Evaluate convergence of a solution-set capable of Navy-wide deployment
- Leverage other DoD programs
- Work toward convergence with civil agencies

Physical Security/Access Control

- CNRSE
- Identifying opportunities to reduce required manning/process layering/duplication of effort
  - Smart Gate technology
  - Waterside security system
  - Perimeter intrusion detection system
  - Perimeter surveillance

Physical Security/Access Control

- CNRSW
- Identifying opportunities to reduce required manning/process layering/duplication of effort
  - Vehicle and personnel access control to piers
  - Enclave personnel tracking
  - Incorporating technology for off-hour manning/monitoring
  - Smart Fence with Sensor back-up
  - Access to North Island

The Way Ahead

From Risk Aversion…

- Cannot afford maximum level of protection everywhere
- "Buying" risk since Khobar Towers, but have not known at what cost

…to Risk Management

- Assigning the right resources to the right place at the right time
- Determining how to distribute resources with respect to the marginal costs of each capability

QUESTIONS?